

Work Order ID 59583

Tuesday, June 08, 2010 11:31:13 AM



Page 1

Item ID: D135-751-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Installation

Start Date: 6/8/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 6/17/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: *H*

Date: 10-6-08

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3507

Rev C

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D135-751-011

CHG001

S. 10/6/01

HJ for BG 10/07/01

110

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Determine square end of tube and deburr

2-Drill #30 pilot holes using DT8678. Open holes to 0.3125".

3- Deburr holes.

DP 10-6-10

B59583

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

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Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

0.00



CNC Bend 1

BENDING MACHINE - SKIDTUBES

Memo

0.00

CNC Delta 100 Bender

1- Bend tube as per program on CNC Bender and Dwg D3507. Use 5/16" locator pin on buggy "A".
2- Cut FWD END of tube as per dwg D3507

DP 10-6-10

W/O:		WORK ORDER CHANGES						
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Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Cut Aft end as per dwg D3507

2-Deburr ends

3-Drill Aft & Fwd Cap holes using DT8678 & DT8901

4-Locate DT8870 & Drill Ground wire hole on top of Tube.

6-Locate DT8870 with #30 cleco in Ground wire hole, then Pilot Drill all X-Bolt holes using #30" drill. ****DO NOT OPEN AFT CAP HOLES****

7-Open crossbolt holes to 0.125" (3 per side). Drill pilot holes for wearplates using Dt8868, Use DT8892 FOR REAR WEARPLATE HOLES.

8-Open six rear wearplate holes using DT8892. Open holes to 0.297"

9- Drill holes section G-G (DT9431)

10-Open Aft & Fwd Cap holes using .208" drill.

11-Bore out aft end of tube as per Dwg D3507 & Detail "B".

12-Open ground wire hole .297" section E-E

13- Section G-G holes must be laid out manually, open to #30.

14-Deburr holes.

10-6-14

W/O:		WORK ORDER CHANGES						
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Reference:




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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Setup Start

Stop

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							
150  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00							
160  QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							

8/10/06/14

70

1 M 12/6/15

DP

10-6-15

W/O:		WORK ORDER CHANGES						
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Setup Start

Stop

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

170

Skidtubes

Skidtubes

Skidtubes

Memo

1-Open X-Bolt holes to .375"(2Places) & .500"(2Places) as per Dwg D3507/ and Detail "F"

2-Counter Sink X-BOLT holes as per Dwg D3507

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3507 & QSI 015

A/R 241 Sike Flex Batch: 113519
Exp Date: 11/21/10

5-Weld x-bolt (D3504-1/-3) spacers as per Dwg D3507 and Detail C-C & D-D.

A/R AL ROD Batch: M114242

6-Grind welds flush

7-Drill Rivet Holes as per Dwg D3507 Using Dt8871A&B

8-Deburr Rivet holes.

0.00

0.00

11/10/15

start time: 1:00 PM 10-06-17 MB
end time: 8:20 AM

12-06-18 MB

BB 10/06/21

3 BE 10/06/21

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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

0.00

S 10/06/21

(76)

Memo

190



Skidtubes

Skidtubes

Skidtubes

0.00

0.00

Memo

1-Rivet D3506-1/-3 as per Dwg D3507.

(77)

BE 10/06/21

200



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

S 10/06/21

(78)

Memo

W/O:		WORK ORDER CHANGES						
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan
Code

Accept Reject Reject Insp.
Qty Qty Number Stamp

210

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

Handwritten: 10/06/21

Handwritten: 1 0

220

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Handwritten: M114811

Memo

0.00

Powder Coating

START TIME: *10:30*
OVEN TEMPERATURE: *320°*
FINISH TIME: *11:00*

Handwritten: 1 Bl 10-6-29.

230

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

Handwritten: 8/06/21

Handwritten: 10

W/O:		WORK ORDER CHANGES						
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

240



HandFinish

HandFinishing

0.00

Hand Finishing

Memo

0.00

Install Wearplate & Ground Wire inserts as per Dwg D3507.

ml

10

06

30

①

250



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Inspect Inserts

8.06.10

⑩

W/O:		WORK ORDER CHANGES						
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run

Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

260



HandFinish

Hand Finishing

HandFinishing

Memo

1-Inspect for Foreign objects

2-Install Fwd & Aft caps as per Dwg D3507 And Detail "A" & "B"

A/R 241 Sika Flex Batch: 113519
Exp Date: 10/11

3-Install Wearplates as per Dwg D3507,

Note: Install (1) Bolt and (1) washer on Ground Wire insert on top of tube
Do not Install Scews where indicated on Dwg(Note #6)

A/R 241 Sika Flex Batch: 113519
Exp Date: 10/11

4-Install Plug assemblys with lubricate as per Dwg D3507.

Batch: 114189

5- Wing Walk as per Dwg D3507 and QSI 005 4.4

Batch: 114432

0.00

0.00

0.00

0.00

ml

10

86

30

1

270



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

8/6/07/01

1

W/O:		WORK ORDER CHANGES						
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

280

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

10-7-15

290

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

8/10/01

10

300

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D135-751-011

Location: 80
PPP Rev: 13

10-7-15

W/O:		WORK ORDER CHANGES					
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Cust Item ID:

Required Date: 6/17/2010 Req'd Qty: 1.00



Customer:

Reference:

Run

Start



Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

310

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/07/01

U 12007-01

W/O:		WORK ORDER CHANGES						
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Picklist Print

Tuesday, June 08, 2010 11:31:18 AM

Page 1

Work Order ID: 59583

Parent Item: D135-751-011

Parent Item Name: Skidtube Installation

Comments: IPP Rev:A 06-06-21 New Issue JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Date: 6/8/2010

Start Qty: 1.00

Required Date: 6/17/2010

Required Qty: 1.00

D2962-150



3.540 Outer Tube, Extrut

Manufactured No 110 Each 31.0000

1 1

Location

Loc Qty

Loc Code

HALL

28672

31
1 31

22.0000

DP 10-6-9

D3504-1



Crossbolt Spacer

Manufactured No 170 Each

22.0000

2 2

Location

Loc Qty

Loc Code

LG

22

31234

2

53742

20

32.0000

1 1

BE 10/6/21

D3504-3



Crossbolt Spacer

Manufactured No 170 Each

32.0000

1 1

Location

Loc Qty

Loc Code

LG

32

31232

12

53743

20

22.0000

2 2

BE 10/6/21

D3504-5



Crossbolt Spacer

Manufactured No 170 Each

22.0000

2 2

Location

Loc Qty

Loc Code

LG

22

36181

2

53744

20

22.0000

2 2

BE 10/6/21

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Comments: IPP Rev:A ☐ 06-06-21 ☐ New Issue ☐ JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Date: 6/8/2010

Required Date: 6/17/2010

Start Qty: 1.00

Required Qty: 1.00

D3505-1 Manufactured No 170 Each 0.0000



Web

D3506-1 Manufactured No 190 Each 78.0000



Doubler

Location Loc Qty Loc Code

ST066 78

51789 78

D3506-3 Manufactured No 190 Each 70.0000



Doubler

Location Loc Qty Loc Code

ST066 70

50563 4

51790 66

MS20601-AD4W3 Purchased No 190 Each 4,028.000



Rivet

Location Loc Qty Loc Code

ST321 4000

114538 4000

ST322 28

113899 28

1114538

B-59884 MB 10-06-77

4 BE 10/06/21

2 BE 10/06/21

12 BE 10/06/21

1 R BE 10/06/21

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Shop Packet Print

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Comments:

IPP Rev:A ☐ 06-06-21 ☐ New Issue ☐ JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Qty: 1.00

Required Qty: 1.00

4
ALS7-1032-130

Purchased No

240 Each

17.0000

38 38



Insert

B# 114723

Location

Loc Qty

Loc Code

ST282

17

113238

17

ALS4-1032-225

Purchased No

260 Each

6,948.000

1 1



Insert

Location

Loc Qty

Loc Code

PK011

6948

110768

6948

AN3C4A

Purchased No

260 Each

1,525.000

31 31



BOLT

Location

Loc Qty

Loc Code

ST350

1525

114103

501

114108

14

114416

12

114523

2

114859

996

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 4

Work Order ID: 59583



Parent Item: D135-751-011



Parent Item Name: Skidtube Installation

Start Date: 6/8/2010

Required Date: 6/17/2010

Comments:

IPP Rev: A ☐ 06-06-21 ☐ New Issue ☐ JLM
 IPP Rev: B 06-12-18 As per Rev B JLM
 IPP Rev: C 07-12-11 ECN 1036 as per rev B DD
 IPP Rev: D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased No

260

Each

726.0000

2

2



Bolt



Location

Loc Qty

Loc Code

ST350

711

114330

11

114523

200

114808

500

ST351

15

113121

10

114108

5

ml 10-06-30

AN526C1032R10

Purchased No

260

Each

486.0000

2

2



Screw



Location

Loc Qty

Loc Code

ST327

100

114494

100

ST328

386

108062

130

110049

256

ml 10-06-30

AN960C10L

NAS1149C0332

Purchased No

260

Each

0.0000

33

33



washer



B# 115000

ml 10-06-30

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Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Page 5

Work Order ID: 59583



Parent Item: D135-751-011



Parent Item Name: Skidtube Installation

Start Date: 6/8/2010

Required Date: 6/17/2010

Comments: IPP Rev:A ☐ 06-06-21 ☐ New Issue ☐ JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Qty: 1.00

Required Qty: 1.00

D2965

Manufactured No

260 Each

49.0000

1 1



Cap, 105 Skidtube

Location

Loc Qty

Loc Code

FP4

49

52057

49

D2965-3

Manufactured No

260 Each

9.0000

1 1



Cap

Location

Loc Qty

Loc Code

FP

9

50560

3

52282

6

D3492-041

Manufactured No

260 Each

70.0000

4 4



Plug Assembly

Location

Loc Qty

Loc Code

FP013

70

57915

6

58180

60

59189

4

B#59114

MM 10-06-30

MM 10-06-30

MM 10-06-30

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Page 5

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Page 6

Work Order ID: 59583

Parent Item: D135-751-011

Parent Item Name: Skidtube Installation

Comments: IPP Rev:A ☐ 06-06-21 ☐ New Issue ☐ JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Date: 6/8/2010

Required Date: 6/17/2010

Start Qty: 1.00

Required Qty: 1.00

D3492-043 Manufactured No 260 Each 33.0000 4 4



Plug Assembly

B# 59421

Location	Loc Qty	Loc Code
FP	2	
54682	2	
FP013	31	
57916	27	
59190	4	

mm 10-06-30

D3492-047 Manufactured No 260 Each 41.0000 2 2



Plug Assembly

Location	Loc Qty	Loc Code
FP	41	
28961	26	
<u>39722</u>	15	

mm 10-06-30

D3508-1 Manufactured No 260 Each 6.0000 1 1



Wearplate

Location	Loc Qty	Loc Code
FP	6	
<u>51261</u>	6	

mm 10-06-30

D3508-3 Manufactured No 260 Each 7.0000 1 1



Wearplate

Location	Loc Qty	Loc Code
FP21	7	
51386	1	
<u>55339</u>	6	

mm 10-06-30

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Page 6

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 7

Tuesday, June 08, 2010 11:31:18 AM

Work Order ID: 59583



Parent Item: D135-751-011



Parent Item Name: Skidtube Installation

Start Date: 6/8/2010

Required Date: 6/17/2010

Comments:

IPP Rev:A 06-06-21 New Issue JLM
IPP Rev:B 06-12-18 As per Rev B JLM
IPP Rev:C 07-12-11 ECN 1036 as per revB DD
IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Qty: 1.00

Required Qty: 1.00

D3508-5 Manufactured No

260 Each

6.0000

1

1



Wearplate

Location

Loc Qty

Loc Code

FP21

6

51388

6

D3508-7 Manufactured No

260 Each

4.0000

1

1



Wearplate

Location

Loc Qty

Loc Code

FP21

4

51389

4

D3558-1 Manufactured No

260 Each

17.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP

17

50925

17

D3558-3 Manufactured No

260 Each

18.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP

18

51391

6

55468

12

mt 10.06.30

mt 10.06.30

mt 10.06.30

mt 10.06.30

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 59583

Parent Item: D135-751-011

Parent Item Name: Skidtube Installation

Comments:

IPP Rev:A ☐ 06-06-21 ☐ New Issue ☐ JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Date: 6/8/2010

Start Qty: 1.00

Required Date: 6/17/2010

Required Qty: 1.00

D3558-5

Manufactured No

260

Each

7.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP

7

50926

7

D3558-7

Manufactured No

260

Each

13.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP

13

43245

5

50927

8

NAS1611-007

Purchased No

260

Each

444.0000

2

2



O-RING

Location

Loc Qty

Loc Code

FP

444

103697

444

NAS1611-010

Purchased No

260

Each

302.0000

4

4



O-RING

Location

Loc Qty

Loc Code

FP

302

110715

100

110915

202

mm 10-06-30

mm 10-06-30

mm 10-06-30

mm 10-06-30

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W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description. Chief Eng	Sign & Date			

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Picklist Print

Page 9

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Work Order ID: 59583

Parent Item: D135-751-011

Parent Item Name: Skidtube Installation

Comments:

IPP Rev:A 06-06-21 New Issue JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD

Start Date: 6/8/2010

Required Date: 6/17/2010

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased No

260 Each

195.0000

4

4



O-RING

Location

Loc Qty

Loc Code

FP

195

114451
114496

157
38

280 Each

1,525.000

31

8

AN3C4A

Purchased No



BOLT

Location

Loc Qty

Loc Code

ST350

1525

114103
114108
114416
114523
114859

501
14
12
2
996

280 Each

0.0000

33

8

AN960C10L

NAS1149C0332
R

Purchased No



washer

D3512-1

Manufactured No



Wearplate

Location

Loc Qty

Loc Code

ST500

13

54452
55466

1
12

280 Each

13.0000

2

2

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MA 10.06-30

10-7-1 SP

MA 115000 10-7-1 SP

10-7-1 SP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

SHOP COPY
RETURN TO
ENGINEERING

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *59583*
BS10-6-08

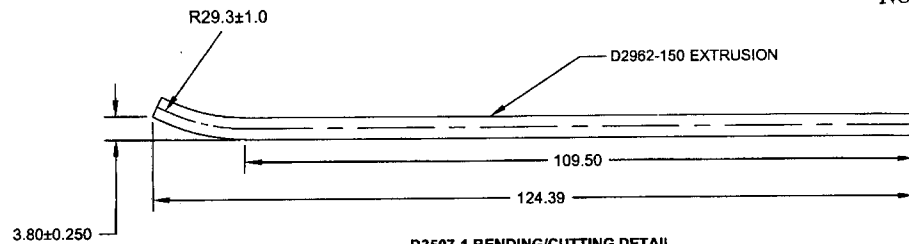
Qty	Part Number	Description
X	D3507-041	SKIDTUBE ASSEMBLY
1	D2982-150	EXTRUSION
1	D2965	CAP
1	D2965-3	CAP
4	D3492-041	PLUG ASSEMBLY
4	D3492-043	PLUG ASSEMBLY
2	D3492-047	PLUG ASSEMBLY
2	D3504-1	CROSS BOLT SPACER
1	D3504-3	CROSS BOLT SPACER
2	D3504-5	CROSS BOLT SPACER
1	D3505-1	WEB
4	D3506-1	DOUBLER
2	D3506-3	DOUBLER
1	D3508-1	WEARPLATE
1	D3508-3	WEARPLATE
1	D3508-5	WEARPLATE
1	D3508-7	WEARPLATE
1	D3558-1	GASKET
1	D3558-3	GASKET
1	D3558-5	GASKET
1	D3558-7	GASKET
38	AELS-1032-130	INSERT
1	AELS-1032-225	INSERT
31	AN3C4A	BOLT
2	AN3C5A	BOLT
2	AN526C1032-10	SCREW
33	AN960C10L	WASHER
12	MS20501AD4W3	RIVET

GENERAL NOTES:

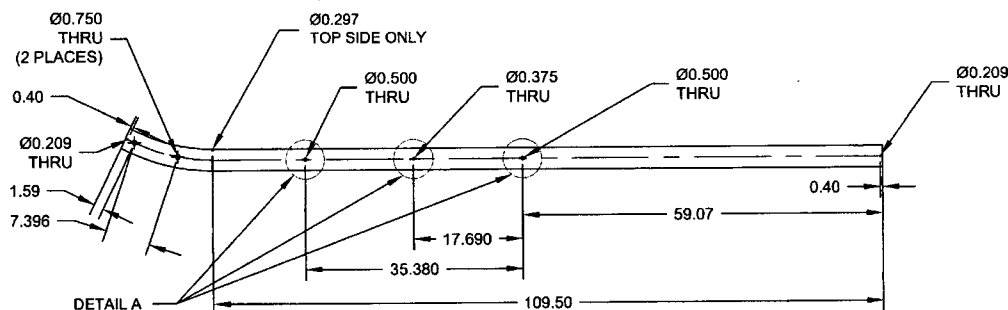
- 1) FINISH:
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING
D3505-1 WEB. POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART
QSI 005 4.3. ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER
DART QSI 005 4.4
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) DIMENSIONS: INCHES UNLESS OTHERWISE NOTED
- 4) WELDING TO BE DONE PER DART QSI 004
- 5) INSERT D3505-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND
WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER
DART QSI 015 AFTER BENDING
- 6) USE DART DRILL TEMPLATE DT8868 TO LOCATE AND DRILL Ø0.297 HOLES (38
PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION C-C (38
PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- 7) DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED
LOCATIONS

RELEASED
07.11.16

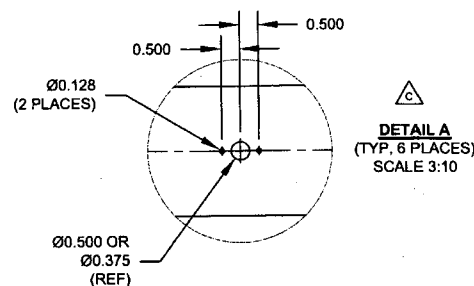
C	ADD D3504-5, FOR SKID GEAR DEFLECTOR; CHANGE FWD CAP BOLT TO AN526C1032-10 SCREW		DC	07.09.19
B	ADD GASKET, CHANGE HARDWARE MATL		PH	06.11.01
A	NEW ISSUE		PH	06.04.21
REV.	DESCRIPTION		BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC		
DRAWN	JIC	PORT HADLOCK, WA		
CHECKED	PH	DRAWING NO.	REV.	
MFG. APPR.	PH	D3507	SHEET 1 OF 2	
APPROVED	PH	TITLE	SCALE	
DE APPR.	PH	EC 135 SKIDTUBE	NTS	
DATE	07.09.19		COPYRIGHT © 2006 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC	



D3507-1 BENDING/CUTTING DETAIL



D3507-1 DRILLING DETAIL



DETAIL A
(TYP. 6 PLACES)
SCALE 3:10

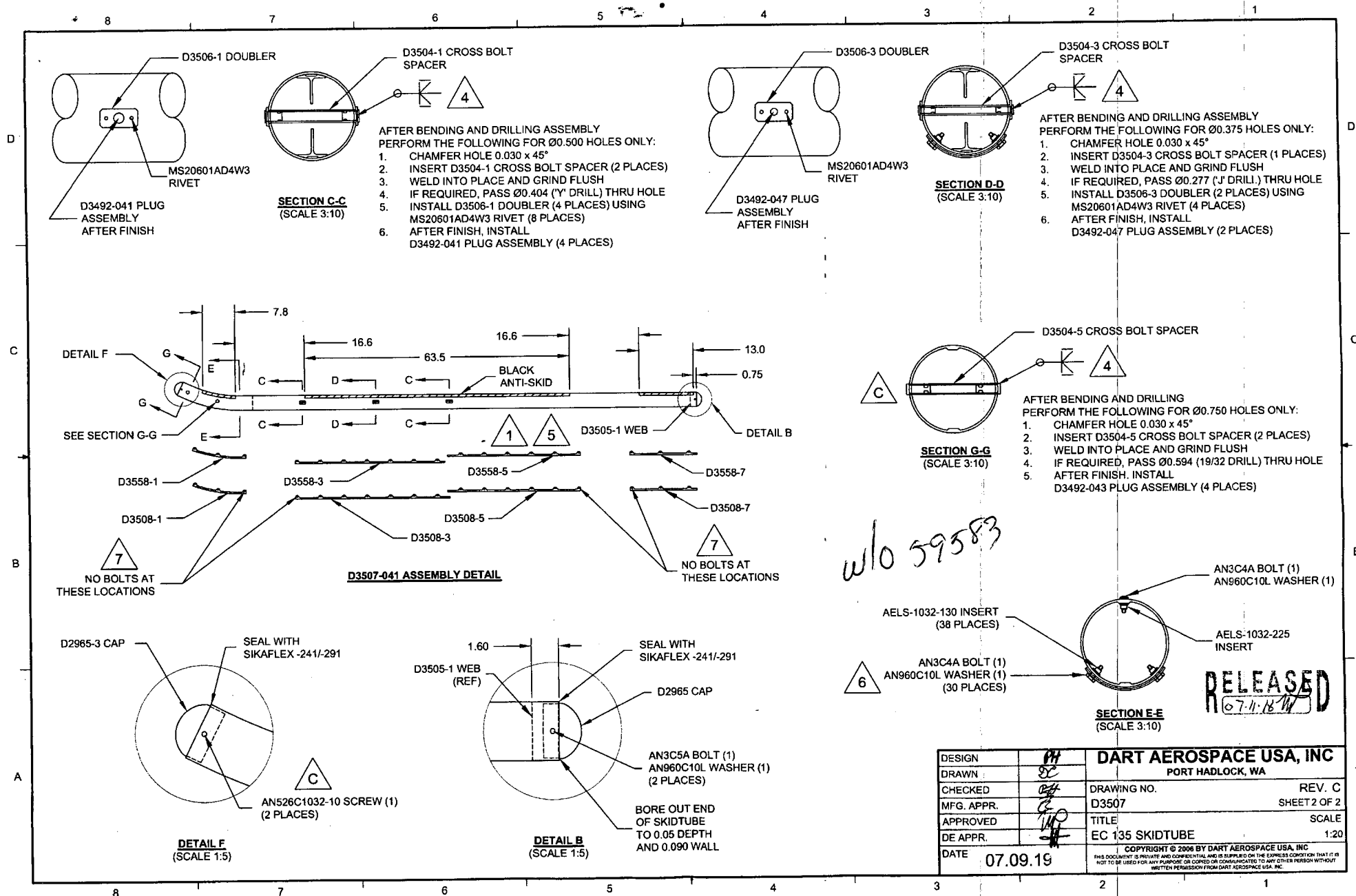
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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W/O:		WORK ORDER CHANGES						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

NO. 204

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 505370
Part number: D135 751 011
Description: Skid tube
Welding Process: Tig ☒ Mig ☐
Base material: Aluminum
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual:

pass ☒ fail ☐

Penetration:

pass ☒ fail ☐

UNACCEPTABLE

Cracks:

pass ☒ fail ☐

Undercut:

pass ☒ fail ☐

Pin holes:

pass ☒ fail ☐

Overlap (cold lap)

pass ☒ fail ☐

Porosity (surface):

pass ☒ fail ☐

Coloration:

pass ☐ fail ☐

Qualifier J. D. D.

Date of Test Coupon 09-07-16

Welder Barclay Elliott

Date of Test Coupon 09/07/16

The above named individual is qualified in accordance with AWS D17.1.2001 to weld